

CLAIMS

We claim:

1. A method comprising:

receiving a template data access query from a first user;

presenting to a second user a layout of a data presentation and one or more preliminary filters from a set of preliminary filters created based on a plurality of database data elements that are to be accessed according to the template data access query;

creating final filters using filter parameters specified by the second user for the one or more preliminary filters, the final filters restricting content to be retrieved from a database for the data presentation; and

building, for the second user, the data presentation with the content retrieved from the database using the final filters.

2. The method of claim 1 wherein the first user is familiar with a data model of the database and the second user is not familiar with the data model of the database being queried.

3. The method of claim 1 wherein a template data access query is a structured query language (SQL) statement.

4. The method of claim 3 wherein building for the second user the data presentation comprises:

adding the final filters to a WHERE clause of the SQL statement; and

executing the SQL statement containing the WHERE clause with the final filters.

5. The method of claim 1 further comprising:

upon receiving the template data access query, executing the template data access query to check whether syntax of the template data access query is correct.

6. The method of claim 5 further comprising:

if the syntax of the template data access query is correct, obtaining data types of the plurality of data elements.

7. The method of claim 6 further comprising:

associating each preliminary filter within the set of preliminary filters with a corresponding data type.

8. The method of claim 7 further comprising:

using the corresponding data type to check a filter parameter provided by the second user.

9. The method of claim 1 further comprising:

presenting the set of preliminary filters to the first user; and
allowing the first user to select the one or more filters from the set of preliminary filters that can be modified by the second user.

10. The method of claim 1 further comprising:

allowing the first user to select lookup filters that require a lookup list from the set of preliminary filters.

11. The method of claim 10 further comprising:
requesting the first user to specify a lookup list of values for each of the selected lookup filters.

12. The method of claim 1 further comprising:
allowing the first user to select required filters that require a default parameter from the set of preliminary filters.

13. The method of claim 9 further comprising:
presenting information identifying the one or more filters to the second user; and
allowing the second user to change a parameter of any of the one or more filters.

14. The method of claim 1 wherein the data access query combines a structured query language (SQL) statement with output related characteristics.

15. The method of claim 1 wherein the data presentation is created based on the output related characteristics from the data access query.

16. The method of claim 15 wherein the data presentation is any one of a graph and a grid.

17. The method of claim 14 wherein the output related characteristics are selected from the group consisting of one or more dimension elements of the output data chart, one or more properties of each dimension element, and one or more metrics to be included in the output data chart.

18. The method of claim 14 further comprising:
requesting a third user to provide default filter parameters for the one or more filters prior to creating the data presentation for the second user.

19. A system comprising:
a query engine to receive a template data access query from a first user and to identify a plurality of database data elements that are to be accessed according to the template data access query;
a filter engine to create a set of preliminary filters based on the plurality of data elements and to create final filters using filter parameters specified by a second user for the set of preliminary filters, the final filters restricting content to be retrieved from a database for a data presentation; and
a data chart engine to build for the second user the data presentation with the content retrieved from the database using the final filters.

20. The system of claim 19 wherein the first user is familiar with a data model of the database and the second user is not familiar with the data model of the database being queried.

21. The system of claim 19 wherein a template data access query is a structured query language (SQL) statement.

22. The system of claim 21 wherein the data chart engine is to build for the second user the data presentation by adding the final filters to a WHERE clause of the SQL statement, and executing the SQL statement containing the WHERE clause with the final filters.

23. The system of claim 19 wherein the query engine is further to execute the template data access query to determine that syntax of the template data access query is correct, to obtain data types of the plurality of data elements, and to associate each preliminary filter within the set of preliminary filters with a corresponding data type.

24. The system of claim 19 wherein the filter engine is further to present the set of preliminary filters to the first user, and to allow the first user to select the one or more filters from the set of preliminary filters that can be modified by the second user.

25. The system of claim 19 wherein the filter engine is further to allow the first user to select required filters that require a default parameter from the set of preliminary filters.

26. The system of claim 19 wherein the data access query combines a structured query language (SQL) statement with output related characteristics.

27. The system of claim 19 wherein the data presentation is created based on the output related characteristics from the data access query.

28. An apparatus comprising:

means for receiving a template data access query from a first user;

means for presenting to a second user a layout of a data presentation and one or more preliminary filters from a set of preliminary filters created based on a plurality of database data elements that are to be accessed according to the template data access query;

means for creating final filters using filter parameters specified by the second user for the one or more preliminary filters, the final filters restricting content to be retrieved from a database for the data presentation; and

means for building, for the second user, the data presentation with the content retrieved from the database using the final filters.

29. The apparatus of claim 28 wherein the first user is familiar with a data model of the database and the second user is not familiar with the data model of the database being queried.

30. The apparatus of claim 28 wherein a template data access query is a structured query language (SQL) statement.

31. A computer readable medium comprising executable instructions which when executed on a processing system cause said processing system to perform a method comprising:

receiving a template data access query from a first user;

presenting to a second user a layout of a data presentation and one or more preliminary filters from a set of preliminary filters created based on a plurality of database data elements that are to be accessed according to the template data access query;

creating final filters using filter parameters specified by the second user for the one or more preliminary filters, the final filters restricting content to be retrieved from a database for the data presentation; and

building, for the second user, the data presentation with the content retrieved from the database using the final filters.

32. The computer readable medium of claim 31 wherein the first user is familiar with a data model of the database and the second user is not familiar with the data model of the database being queried.

33. The computer readable medium of claim 31 wherein a template data access query is a structured query language (SQL) statement.